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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,238	05/09/2001	Graham P. Allaway	51320-AB/JPW/SHS	4501

7590

06/03/2004

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EXAMINER

LI, BAO Q

ART UNIT

PAPER NUMBER

1648

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,238

Applicant(s)

ALLAWAY ET AL.

Examiner

Bao Qun Li

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-48 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1648

DETAILED ACTION

Claims 1-48 are pending.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, 11-12, drawn to a polypeptide comprising a sequence corresponding to a portion of a chemokine receptor, classified in class 530, subclass 351.
 - II. Claims 6-8, 11-12, drawn to a polypeptide and a composition comprising the polypeptide having a sequence corresponding to that of a portion of HIV-1 envelope glycoprotein, class in 424, subclass 208.1.
 - III. Claims 9-10, drawn to an antibody and a composition comprising the antibody binding to chemokine receptor, classified in class 424, subclass 131.1.
 - IV. Claims 13-16, drawn to a method of inhibiting HIV-1 infection, classified in class 424, subclass 93.2.
 - V. Claims 17-18, drawn to a non-chemokine agent binding to the chemokine receptor CCR5, classified in class 530, subclass 300.
 - VI. Claims 19-21, 25-26, drawn to a molecule binding to the chemokine receptor CCR5 and inhibiting the HIV-1 binding to CD4 cells, which is linked to a ligand of antibody classified in class 530, subclass 351.
 - VII. Claims 22-24, 25-26, drawn to a molecule binding to molecule binding to chemokine receptor inhibiting HIV-1 binding to CD4 cells, which is linked to a compound to increase the half-life of non-chemokine agent, classified in class 424, subclass 9.1.
 - VIII. Claims 27-30, drawn to a method of determining a non-chemokine agent, classified in class 435, subclass 4.
 - IX. Claims 31, 33, drawn to transgenic non-human animal comprising an isolated DNA molecule encoding a chemokine receptor, classified in class 800. Subclass 9.
 - X. Claims 32 and 34, drawn to a non-human animal comprising an isolated DNA molecule encoding a portion of CD4 receptor, classified in class 800, subclass 11.

Art Unit: 1648

- XI. Claim 35, drawn to a transformed cell comprising a nucleic acid molecule encoding chemokine receptor CCR5, classified in class 435, subclass 350.
- XII. Claims 36-42, 47-48, drawn to an agent and a method of using the agent that inhibits HIV-1 infection, classified in 424, subclass 93.1. (Further elect one of the following agent

Upon election of Group XII, a further restriction to one of the following inventions is required under 35 U.S.C. 121, Applicant is additionally required to elect a single agent on the merits. (1) oligopeptide, (2). A nonpeptide agent, (3) a polypeptide.

- XIII. Claim 43, drawn to a method inhibiting HIV-1 infection, classified in 435, subclass 2.
- XIV. Claims 44-46, 47-48, drawn to a molecule and a method of using the molecule, which binds to chemokine receptor CCR5 and is linked to a polyethylen glycol, classified in 424, subclass 9.34.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-III, V-VII and IX-XIV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to different products having different structures and functions, e.g. the product of Group I is a polypeptide comprising a chemokine receptor, whereas, the product of Group II is a polypeptide comprising HIV envelope protein.

Inventions of subgroups 1) to 3) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to different structures and functions, e.g. the agent of group 1) is an oligopeptide, whereas the agent of group 2) is directed to a non-peptide agent.

Inventions IV and VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation,

Art Unit: 1648

different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to different methods with different procedures and functions, e.g. the method of Group III is to inhibit HIV-1 infection, whereas the method of group VIII is to determine a non-chemokine agent.

Inventions I and IV are related as process of using and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be practiced with materially different product or (2) that the product as claimed can be practiced by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed in group I can be used by another and materially different process such as to influence the leukocyte migration rather than treating HIV infection.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the literature and sequence searches required for one of the Groups are not required for another one of the Groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 571-272-0904. The examiner can normally be reached on 7:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-272-1600.

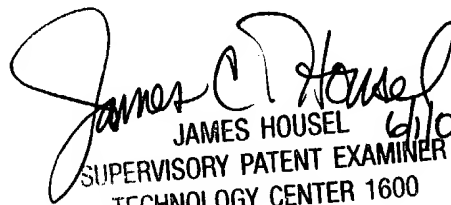
Art Unit: 1648

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Qun Li

Art Unit 1648

May 14, 2004


JAMES HOUSEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600
6/1/04